

Step-Scale and Sliding-Scale Royalty Rates

Step-scale (Schedule B and C) and sliding-scale (Schedule D) royalty rates for Federal onshore leases. Includes schedules and instructions for well counts and inventory.

General:

Step-scale schedule for both **oil** and **gas**, and sliding-scale schedule for **oil** royalties are based on the average daily production per well per month on a given property (i.e., lease, CA, PA). The average daily production per well for a property is computed on the basis of a 28-, 29-, 30-, or 31-day month, the number of wells on the property counted as producing, and the gross production (this includes production from wells not considered countable). The term "gross production" is interpreted to mean all production from the lease excluding any production used on the lease or unavoidably lost. In other words, volumes that are not subject to royalty (i.e., production used on the lease and/or unavoidably lost as shown on the production report) are not included in the determination of royalty rates. Production sold in the same month it is produced is synonymous with sales from a lease.

Sliding-scale schedule for **gas** royalties are based on the total gas produced or allocated to the lease from all sources per month (i.e., if a lease participates in one or more units, production is totaled from all units for that lease and the royalty rate ranges from 12 ½ percent to 16 2/3 percent - see tables).

Well Counts:

Wells to include:

1. Commercially operated producing wells:
 - Existing (producing in a previous month) oil wells – must produce at least 15 days during the month
 - New oil wells – must produce at least 10 days during the month
 - Gas wells – any wells that produce during the month are counted
2. Injection wells (includes all injection wells; gas, water, steam, etc.) – must be operated at least 15 days per month; the total days operated includes production and injection days added together. Injection wells count for gas and oil (water and gas can count for oil if wells are tertiary recovery).

Countable wells are considered producing for the entire month. Oil and gas wells are counted separately based on the production from each well. In other words, a producing oil well (BLM status on MMS-3160 of POW) that has some gas production would be counted in the well counts for the oil royalty rate calculation, not the gas. On previously producing properties, if no wells produce 15 days or more during the month, the average daily production rate is computed on the basis of actual producing well days.

Example: The following property has a schedule “B” (step-scale) royalty rate and has 8 wells. For the month of June, the summary of operations is:

<u>Well No. and Record</u>	<u>Count</u>	<u>Production per well</u>
Produced full time for 30 days	Y	200 bbls
Produced for 26 days; down 4 days for repairs	Y	200 bbls
Produced for 28 days; down June 5 for 12 hours, down June 14 for 6 hours, and down June 26 for 24 hours	Y	200 bbls200 bbls
Produced for 12 days; down June 13-30	N	75 bbls
Produced for 8 hours every day (head well)	Y	75 bbls
Not operated	N	
New well, completed June 17; produced for 14 days	Y	150 bbls
New well, completed June 22; produced for 9 days	N	100 bbls
		Total Production: 1,000 bbls

In this example, 5 of the 8 wells are counted as producing for 30 days. The average production per well per day is determined by dividing the total production of the property for the month (including the production from the wells not counted) by 5 (the number of wells counted as producing), then by the number of days in the month.

$$1,000 \div 5 \div 30 = 6.67 \text{ (12 1/2\% royalty rate - see schedule “B” for oil).}$$

Inventory:

The applicable royalty rate is determined by the production volume in the month in which that oil or gas is produced, not the month in which it was sold. The first in first out method should be used when calculating royalty rates on inventory.

Example:

<u>Lease ABC</u>	<u>Begin Inventory</u>	<u>Oil Produced</u>	<u>Oil Sold</u>	<u>End Inventory</u>
June	0	1,000	700	300
July	300	2,000	1,200	1,100

In June - 1,000 barrels are produced and 700 barrels are sold leaving 300 barrels as the ending inventory. The royalty rate for the 700 barrels sold in June was determined to be 12 ½ percent (see well count example above).

In July - 2,000 barrels are produced during the month and 1,200 barrels are sold leaving 1,100 barrels as the ending inventory. The inventory carried over into July will be the first oil sold in July. The royalty rate on the 300 barrels produced during June and sold in July would be determined based on the royalty rate established for June production (i.e. 12 ½ percent). The royalty rate for the 900 barrels produced and sold in July is the royalty rate established for July based on the 2,000 barrels produced. The royalty rate on the 1,100 barrels remaining in inventory at the end of July will be paid using the royalty rate calculated for July when the production is sold.

Schedules:

The following tables and descriptions define what royalty rates should be used based on production.

Schedule “B”(Step Scale):

1. Oil - When the average production for the month in barrels per well per day is:

<u>Over</u>	<u>Not Over</u>	<u>Royalty Rate</u>	<u>Over</u>	<u>Not Over</u>	<u>Royalty Rate</u>
	50 bbls	12 ½%	130 bbls	150 bbls	19%
50 bbls	60 bbls	13%	150 bbls	200 bbls	20%
60 bbls	70 bbls	14%	200 bbls	250 bbls	21%
70 bbls	80 bbls	15%	250 bbls	300 bbls	22%
80 bbls	90 bbls	16%	300 bbls	350 bbls	23%
90 bbls	110 bbls	17%	350 bbls	400 bbls	24%
110 bbls	130 bbls	18%	400 bbls		25%

2. Gas – Including inflammable gas, helium, carbon dioxide and all other natural gases and mixtures thereof, and on natural or casinghead gasoline and other liquid products obtained from gas, when the average production for the month in Mcf of gas per well per day is:

Over	Not Over	Royalty Rate
	5,000 Mcf	12 ½%
5,000 Mcf		16 2/3%

Schedule “C”(Step Scale):

1. Oil - A royalty rate of 12 ½ percent on the production removed or sold from:
 - a. Land determined by the Director, Geological Survey, not to be within the productive limits of any oil or gas deposit on August 8, 1946;
 - b. An oil or gas deposit which was discovered after May 27, 1941, by a well or wells drilled on the leased land and which is determined by the Director, Geological Survey, to be a new deposit; or
 - c. Allocated to the lease pursuant to an approved unit or cooperative agreement from an oil or gas deposit which was discovered on unitized land after May 27, 1941, and determined by the Director to be a new deposit, but only if at the time of discovery the lease was committed to the agreement or was included in a duly executed and filed application for approval of the agreement.
2. Oil - Leases not subject to general section above. On production of oil removed or sold, where a flat royalty rate of 5 percent was fixed on the original lease.

When the average production for the month in barrels per well per day is:

Over	Not Over	Royalty Rate	Over	Not Over	Royalty Rate
	110 bbls	12 ½%	200 bbls	250 bbls	21%
110 bbls	130 bbls	18%	250 bbls	300 bbls	22%
130 bbls	150 bbls	19%	300 bbls	350 bbls	23%
150 bbls	200 bbls	20%	350 bbls	400 bbls	24%
			400 bbls		25%

3. Gas - including all products, when the average production for the month in Mcf per well per day:

Over	Not Over	Royalty Rate
	5,000 Mcf	12 ½%
5,000 Mcf		16 2/3%

Schedule “D”(Sliding Scale):

1. Oil - a royalty rate of 12 ½ percent under the same provisions shown for schedule “C” above, under number 1.
2. Oil - on production of oil removed or sold not subject to schedule “C” above, under number 1.
- a. For all oil produced at **30 degrees API or over**:

Over	Not Over	Royalty Rate
	20 bbls	12 ½%
20 bbls	50 bbls	16 2/3%
50 bbls	100 bbls	20%
100 bbls	200 bbls	25%
200 bbls		1/3%

- b. For all oil produced at **less than 30 degrees API**:

Over	Not Over	Royalty Rate
	20 bbls	12 ½%
20 bbls	50 bbls	14 2/7%
50 bbls	100 bbls	16 2/3%
100 bbls	200 bbls	20%
200 bbls		25%

3. Gas (and casinghead gasoline defined as any natural gas produced from an oil well) **including total gas produced or allocated to the lease from all sources:**

Over	Not Over	Royalty Rate
	3,000 Mcf	12 ½%
3,000 Mcf		16 2/3%

The average production per well per day for oil and gas shall be determined pursuant to 30 CFR, Part 221, “Oil and Gas Operating Regulations.” Step- and sliding-scale royalty rates can be found at 43 CFR, Part 3162.7-4.

Sources:

- 43 CFR Chapter 11 § 3162.7-4
- Federal Register/Vol. 56, No. 234, December 5, 1991, Page 63661
- Department of the Interior, Geological Survey, Conservation Division Manual/Release CDM 647.13, January 1979.